J3 Technology

Custom Communication Solutions

September 18, 2017

FCC
Headquarters Building
445 12st SW
Washington, DC 20554

RE: GN Docket No. 13-111 FCC 17-25 Comments and Responses to Proposed Rule – 47 CFR Part 20 – Promoting Technological Solutions to Combat Contraband Wireless Device Use in Correctional Facilities

Dear FCC:

The J3 Technology CEO and CTO met with the following representatives of the FCC, at the FCC Headquarters, on September 6, 2017:

IN-PERSON
Ron Repasi - Office Engineering & Technology
Charles Mathias – WTB - Ombudsman – Contraband Phone
Jane Kelly – Atty – Public Safety
Roger Noel – WTB
Michelle Sisti - WTB

ON-PHONE
Melissa Conway – Atty – WTB
Lloyd Coward – WTB

The discussion focused on the FCC Report & Order FCC 17-25 issued on March 24, 2017 and more specifically, Section IV C (Other Technological Solutions), with regard to ***Quiet Zones & Dead Zones***.

First, from a definitional standpoint the terms Quiet Zones & Dead Zones are roughly explained in the FCC Report & Order, but we believe they merit a more precise definition. We interpret Dead Zones to require some form of active carrier participation (adjustment of RF levels, changing antenna orientations, etc). In contrast, we interpret Quiet Zones as involving some form of active installation of a system at the facility, without the need for any participation by the carrier. Accordingly, we will use those definitions in this comment, and we also hope that these definitions will be adopted by the FCC so that future discussions and comments can be more precise.

Second, we believe that Dead Zones are NOT a viable solution because of the requirement for carrier intervention, as well as the imprecise control of the RF signals. The solution to the contraband cellphone problem cannot rely on the carriers to modify their network. Carriers are continually making modifications to network configurations and requiring coordination of those with the correctional facilities is simply not feasible. Additionally, the concept of the carrier adjusting their RF footprint so that it does not cover the correctional facility, but does fully cover the surrounding areas is based on a flawed

understanding of RF propagation. We submit that it is not technically feasible to have this precise a control of the carrier RF signals. Accordingly, we assert that Dead Zones are not a viable solution.

Third, we believe Quiet Zones can be a viable approach, if implemented properly. Some have suggested standard jamming equipment to provide a quiet zone. Standard jamming is NOT a viable solution for establishing a quiet zone. This has been shown in numerous countries such as Brazil, India, and New Zealand. It was also shown in the 2010 study by NTIA performed in Cumberland, MD in which the in band RF signal strengths (in the carrier bands) measured outside the affected building were above the desired level (please see NTIA_2010_Jammer_Technical_Memo - TM-10-468).

Fourth, the participants had a discussion of Section 333 with emphasis on three elements: who is covered, what/who is protected, what is interfere. The relevant text reads as follows - No person shall willfully or maliciously interfere with or cause interference to any radio communications of any station licensed or authorized by or under this chapter or operated by the United States Government.

J3 Technology believes that there are viable options for implementing Quiet Zones, and we would like to explore these as part of the ongoing effort to solve the contraband cellphone problem. The solution to this problem involves the ability to think outside the box and to creatively address the RF challenges inherent in correctional facilities.

We look forward to an ongoing discussion and collaboration to arrive at a solution that finally solves the contraband cellphone problem and also satisfies all of the relevant parties.

/s/
J3 Technologies LLC